

Appendix E. System Features

PRIVACY AND SECURITY	System Function	Necessary	Desirable
	User verification	<ul style="list-style-type: none"> Individual user ID and password or PIN number Set minimum password length and characteristics 	<ul style="list-style-type: none"> Biometric user verification and/or use of electronic signature pads Set automatic time-out and intruder lock-out
	Activity recording	<ul style="list-style-type: none"> Track user activities Separately track revenue received by location, payment type and service Track record changes and activities Track customer requests Track inventory and use of numbered security paper Retain old record information and impounded records after changes are made. 	<ul style="list-style-type: none"> Track complaints and resolutions Track user-specific revenue received by payment type
	Data security	<ul style="list-style-type: none"> Allow database recovery to a specific point in time through use of backup and Oracle transaction log. Identify data that needs to be re-entered. Central control of printing functions – certain types of documents such as certificate copies can only be printed on designated printers. HTTPS with minimum 128-bit data encryption Meet State and industry standards for database security including firewalls 	<ul style="list-style-type: none"> Data encrypted in database
	Cross-match records across databases	<ul style="list-style-type: none"> Automatic cross-match of birth and death records Allow identification of partial matches and correction of false positives. 	<ul style="list-style-type: none"> Automatic cross-match of other types of records
	Limiting user access	<ul style="list-style-type: none"> Screen-level and field-level access control Administrator control of user roles and locations 	<ul style="list-style-type: none"> Oracle security controlled within application rather than separate tool Differing levels of administrator authority

Appendix E

FLEXIBILITY	System Function	Necessary	Desirable
	Staged implementation	<ul style="list-style-type: none"> Allow for system to be implemented in modules 	
	Enabling user access	<ul style="list-style-type: none"> Allow access using various levels of technology Allow public and agency access to data as permitted by statute and policy. 	<ul style="list-style-type: none"> System incorporates an existing module for public and agency access to system.
	Integration with existing systems	<ul style="list-style-type: none"> Export data in formats required by contracts with SSA, NCHS, and others. Multiple import/export data formats to allow batch data submission from other systems and data export to other systems, including archival storage (transfer to microfilm) Compatible with U.S. standard birth and death certificate data collection 	<ul style="list-style-type: none"> Integrate with federal programs (SuperMicar, Geo Codes)
	Allow for future upgrades	<ul style="list-style-type: none"> Can be upgraded to incorporate future technology improvements 	
	System modifications	<ul style="list-style-type: none"> Allow statute and policy changes to be incorporated into the system by creating or modifying fields, edits, defaults, and instructions without changing code. 	
	Data matching	<ul style="list-style-type: none"> Allow multiple users to submit data for a single record Identify duplicate registrations 	
	Manual entry and modification of data	<ul style="list-style-type: none"> Allow authorized users to override data edits and manually enter records to correct errors and ensure data integrity 	

PRODUCTIVITY	System Function	Necessary	Desirable
	Filing of vital records	<ul style="list-style-type: none"> Local Registrars must remain as the point of filing. 	
	Electronic data submission	<ul style="list-style-type: none"> Allow all vital events, customer requests and amendments to be filed and issued electronically with verifiable integrity. Automatic assignment of multiple file numbers and dates 	<ul style="list-style-type: none"> User customizable interface screens
	Automated data entry and record identification	<ul style="list-style-type: none"> Incorporate customizable online data edits and default field values Allow records to be marked for various purposes to identify record status and to limit accessibility 	<ul style="list-style-type: none"> Mouse-less functioning (graphical data entry using keyboard) Automatically identify and report suspicious transactions
	Facilitate communication with users.	<ul style="list-style-type: none"> Incorporate customizable help screens and instructions. 	<ul style="list-style-type: none"> Facilitate automated queries and corrections of errors Incorporate online training Message posting by administrator to notify users of changes, etc.
	Report and copy creation and dissemination	<ul style="list-style-type: none"> Creation of standard and customizable reports using multiple variables Print full or partial certificate information (legal vs. statistical) and notations (administrative use only). 	<ul style="list-style-type: none"> Ability to schedule regular report execution Automatic creation of standard letters and notifications Built-in report builders or wizards.
	System availability	<ul style="list-style-type: none"> Allow data submission during non-business hours 	<ul style="list-style-type: none"> Allow continued data submission when Internet is unavailable through batch loading when access is restored
	Search functions	<ul style="list-style-type: none"> Allow records and customer requests to be located using partial information and multiple fields 	<ul style="list-style-type: none"> Capable of Soundex searches

PRODUCTIVITY	System Function	Necessary	Desirable
	System availability	<ul style="list-style-type: none"> • Allow database recovery to a specific point in time through use of backup and Oracle transaction log. Identify data that needs to be re-entered. • Provide adequate maintenance and assistance to users to ensure availability. 	
	Vendor contract requirements	<ul style="list-style-type: none"> • Vendor agrees to Service Level Agreement with monetary penalties for non-performance • Vendor provides system training (train the trainers) • Guarantee of source code control if vendor goes out of business 	<ul style="list-style-type: none"> • Vendor organizes users group to share best practices and costs of upgrades and improvements • Vendor provides recorded training (CD-ROM, Internet, video, etc.) • Ownership of source code (after two years) or source code in third-party escrow